

2.0 PLANNING PROCESS

2.0 Documentation of the Planning Process

The Indiana Department of Homeland Security is the lead agency responsible for coordinating the development of the State's Enhanced Hazard Mitigation Plan. The Mitigation Division assumes the lead in the planning efforts. The Mitigation Division is assisted by various other state agency representatives, who serve on the Indiana State Hazard Mitigation Council (ISHMC).

The ISHMC was first activated following the Federal Disaster DR-1418-IN in the summer of 2003. The Council was created under Executive Order 03-34 and continued under Executive Order 05-09. This council was a direct evolution of the Interagency Hazard Mitigation Team which was first activated following the flood disaster Fort Wayne suffered in the early winter of 1982, pursuant to the December, 15, 1980 Interagency agency Agreement for Nonstructural Damage Reduction to identify mitigation opportunities and issues. The Council will work to assure that the State follows mitigation principles during the design and construction of state facilities or state-funded projects. The Council will also work to encourage and inform the inhabitants of the state of the necessity of mitigation activities in all levels of government and their communities. This ISHMC will also assist in the development, implementation, and maintenance of the State's All Hazard Mitigation Plan. The Council will assist IDHS in developing state mitigation goals and objectives, state agency capability analysis, and the identification of funding sources and statewide mitigation projects.

Individual members of the Council bring their varied background, specialized expertise, and perspectives together to create interagency, interdisciplinary insight to identify hazard vulnerability and evaluate mitigation plans and projects. The interagency aspect of the team diffuses political pressure on the grantee agency and eases the burden of resources. The following agencies have been appointed to serve on the Council.

TABLE 2-1- INDIANA STATE HAZARD MITIGATION COUNCIL

Indiana Dept. of Transportation (INDOT)	Professional Standards Board
Indiana Dept. of Natural Resources (DNR)	Health Professions Board
Indiana Dept. of Environmental Management	Indiana State Police
Indiana State Dept. of Health	Military Department of Indiana
Indiana Dept. of Commerce	State Auditor
Indiana Housing Finance Authority	Worker's Compensation Board
Indiana Dept of Homeland Security (IDHS)	Attorney General
Indiana Dept. of Insurance	Utility Regulatory Commission
Indiana Dept. of Labor	State Budget Agency
Indiana Dept. of Revenue	State Board of Accounts
Indiana Dept. of Family and Social Services	State Board of Animal Health

Indiana Dept. of Fire and Building Services Indiana Dept. of Personnel Indiana Dept. of Workforce Development Indiana Dept. of Correction Indiana Dept. of Administration Indiana Dept. of Education Indiana Dept. of Local Government Finance Indiana Dept. of Financial Institutions Indiana Military Department of the State Office of Secretary of State Office of Treasurer of State Governor's Council on People with Disabilities Alcohol and Tobacco Commission	Civil Rights Commission Public Safety Training Institute Law Enforcement Training Board Office of Commissioner of Agriculture Commodity Warehouse Licensing Agency Bureau of Motor Vehicles Port Commission Commission of Public Records State Office Building Commission Information Technology Oversight Commission Gaming Commission Intelnet Commission
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Executive Order 89-12 established the Indiana Department of Homeland Security and tasked it with coordinating the State's comprehensive disaster management system for the protection of its citizens.

Executive Order 03-34 designates the Director of the Indiana Department of Homeland Security as the State's Coordinating Officer for the purpose of coordinating all emergency and disaster mitigation, preparedness, and response and recovery activities in Indiana.

Executive Order 05-09 superseded the above and in doing so combined both orders in to a single executive order continuing the principles put forth in these documents and re-establishing the Emergency Management advisory group and the Indiana State Hazard Mitigation Council. It tasks the council to not only to identify projects, but to promote mitigation practices and principles within local and state government and the public.

Mitigation Planning Process

The first step in hazard mitigation planning is the development of a planning process or strategy. The planning team will utilize the following planning process in the development and maintenance of the State's All Hazard Mitigation Plan:

- Organize Resources
- Seek Public Participation in the Planning Process
- Develop Goals and Objectives
- Review State and Local Hazard Analysis and Risk Assessments
- Identify Existing Resources
- Identify Mitigation Alternatives
- Development Plan Maintenance Policies
- Approve Plan

Implementation and Maintenance

The Indiana State Hazard Mitigation Officer (SHMO) shall be responsible for the maintenance and implementation of this plan. The SHMO is also responsible for

monitoring the funding and implementation of mitigation projects in the state administered by the Indiana Department of Homeland Security.

Monitoring

The SHMO and ISHMC will monitor the plan with each declared disaster for the continued relevancy of its goals and objectives. They are also responsible for determining whether funded projects have been effective in achieving these goals. They will determine whether the designated strategies and measures have been effective in reducing losses due to the natural hazards they were designed to mitigate against and if they have reduced losses from other hazards.

Several projects in this plan stipulate an “ongoing” timeline. The Indiana Department of Homeland Security will update these projects each year, by altering the objectives, if needed, and reporting on the status.

Evaluation, Updating, Expansion

When there are no declared disasters, the SHMO will update and expand this plan yearly to include other natural and man-made hazards that threaten the citizens of the State of Indiana, and delete or add mitigation goals, or legislative changes.

The plan will be expanded on the basis of a continuing evaluation of the hazards that consistently cause:

- **Loss of life**
- **Damage and destruction of property**
- **Negative impact on the state’s economic and social structure**

2.1 Plan Update Process - 2008

The Planning Process for the 2008 update of the State Hazard Mitigation plan was a collaborative effort. Federal and State agencies met monthly to examine the existing hazard mitigation plan and identify areas for potential improvement and/or enhancement. Each contributing agency considered the plan from their agency’s perspective and how the plan element interrelates with the Indiana Department of Homeland Security’s Mitigation Program. The planning team utilized the basic membership of the Indiana Silver Jackets Program and added additional agencies to bring forth the all hazards perspective. The minutes and meeting notes are attached in **Appendix II**.

Each of the participating representatives was provided a full copy of the current plan in electronic format and was asked to provide additions, corrections, adjustments, etc to the document. Meetings were held monthly in which a section of the plan was examined by the planning team and contributions, updates, changes and input were solicited. All organizations submitted either verbal or written comments, in some cases re-writing the portions as necessary

and submitting them electronically. All submittals were shared via email and at the meetings for the rest of the team to review. All comments and contributions were electronically stored for inclusion in the updated document. With the assistance of a Disaster Assistance Employee, updates provided by the various agencies were integrated into the plan format and data gaps or transitions were identified. A copy of the draft plan was submitted to the team for final review and last minute fine tuning. All agencies contributed wither in a verbal format or in writing.

The following is a list of agencies and organizations that participated in the update of this plan:

IN Dept of Homeland Security	IN Dept of Natural Resources
Grants and Planning Divisions	Division of Water
Fire and Building Safety Division	Dams and Levees Program
Recovery Division	State Historical Perseveration Office
IN Dept Of Environmental Management	Maumee River Basin Commission
IN Geological Survey	US Army Corps of Engineers – Louisville and Detroit
IN Office of Energy and Defense Development	IN Office of Community and Rural Affairs
Federal Emergency Management Agency	Dept. of Housing and Urban Development
US Environmental Protection Agency	US Department of Homeland Security
US Geological Survey-Indianapolis Office	US Dept of Agriculture – NRCS
National Weather Service – Coordinated by Indianapolis	POLIS Center

ALL sections of this plan were updated in some capacity. Some sections were completely rewritten while others had only minor changes made to them. The Mitigation Planning Team met monthly to discuss a chapter of the plan at a time, provide input on what needed to remain intact and what needed to be changed.

The first two Sections of the Plan were adjusted by the Mitigation Section staff of the Indiana Department of Homeland Security with general information supplied by the planning team members. In Section 3, updates were provided by the National Weather Service as well as the US Geological Survey, Indiana Department of Natural Resources, the US Army Corps of Engineers, FEMA, the POLIS Center and the Indiana Department of Homeland Security. In particular, the Climatological Summary of Section 3 was rewritten by the Indianapolis Office of the National Weather Service with contributions from the other five National Weather Service offices serving Indiana. Additionally, the National Weather Service provided a very detailed analysis of the tornado history of Indiana. This information is reflected both in the narrative discussions as well as the maps found in the appendixes. The Polis Center provided feedback on the hazard and risks issues found in the local plan development processes. In addition, the POLIS Center conducted, for the state of Indiana, a Statewide Flood Risk Assessment. This document may be found in Appendix 6 along with a Statewide Earthquake Risk Assessment.

The state is participating in the Strategic Earthquake Planning Initiative which is being done in recognition of the 200th anniversary of the New Madrid Earthquakes. As part of the planning process the MAE (Mid-America Earthquake) Center at the University of Illinois, has done extensive earthquake modeling of the southwest portion of the state. These studies look at the infrastructures vulnerability to this level of seismic activity. Due to some final review of their data, we were not able to access this information for this version of the plan. We will include this data as part of **Annex VI** when we have final version of the data.

Section 4 addresses the Indiana Statewide Mitigation Strategy including goals, objectives and specific projects to meet the goals set forth. The Mitigation Planning Team again looked at the goals and projects and determined where adjustments and/or refinements were needed based on progress made within the past 3 years, current needs and funding environments, and anticipated direction from the future of mitigation in Indiana. In particular 3 areas were refined, dams and levee information, building codes, and the cataloging and mitigation of the repetitive loss and severe repetitive loss properties in the state.

Sections 5 and 6 were reviewed by the entire Planning Team, but changes were made to the document by the Mitigation Section Staff Members based on the input received from the Planning Team. In Section 5, we updated the process used to analyze and integrate local data into the State Plan. Also in Section 5, an enhancement to our property acquisition process was developed resulting in a formal policy document. The acquisition policy document is included in Appendix 5 of this plan. In Section 6, timeframes and methodology for maintaining our plan were amended as appropriate.

The Appendixes and Annexes reflect a number of regulatory updates as well as materials supplied by Planning Team Member Agencies to supplement and further explain discussions within the narrative portion of the plan. With the Mitigations Section having a GIS specialist on the team, many of the data charts and statistics were able to be transferred to a pictorial format for ease of review and overview. Most of the maps are presented in a statewide format and where necessary are broken down further by Indiana Department of Homeland Security districts to show the regional nature of the information depicted.

Since the approval of the 2005 plan, state and federal agency coordination has developed into a tremendous tool for the benefit of all programs and the citizens of Indiana. The Silver Jackets Program brings together eleven agencies both state and federal and discusses programmatic challenges and opportunities. The program allows the programs to share upcoming projects and encourages collaboration so that each program can enhance the opportunities for the next. It also has opened the doors for innovative problem solving. Each agency has limitations and restrictions on their activities, however, in many cases the neighboring agency's responsibilities take off where the first one's end. Through

this collaboration, challenges that once were impossible to address are within reach. Even when a solution for a challenge is not available, the resources and knowledge bases may be pooled to allow the team to make sound holistic recommendations to resolve the challenges at hand.

This collaboration is still in its infancy having only been in place for the last two years, but it has already had a tremendous impact in disaster response, recovery and mitigation activities.

2.2 Coordination among Agencies and Integration with other Planning Efforts

As previously described IDHS mitigation division worked, with the assistance of the Governor's office as a result of the July 4th flood of 2003, to create the Indiana State Hazard Mitigation Council. The Governor's Executive Order (03-34) established the Council and tasked it with the coordination of the states existing (and to this point) unrecognized mitigation efforts in state activities (This executive order was superceded by 05-09 in January, 2005). The council serves as a means to coordinate mitigation efforts (both projects and planning efforts pre and post disaster). The members of the council are listed in section 2.0 of this plan and table 2-1.

The council designated the following agencies, private partners, and organizations to assist the council in its statewide planning efforts. The designees all participate in projects or planning activities that directly impact the mitigation goals of the state and local jurisdictions. The members of the subcommittee include, but are not limited to the following:

Indiana Department of Homeland Security-- Earthquake Program Manager Public Assistance Officer State Planner Local Planner	Indiana Department of Environmental Management Department of Administration – Land Office Facility Management
Department of Natural Resources -- Division of Water Dam Safety Flood Plain Management	Indiana Geological Survey Indiana GIS Commission Maumee River Basin Commission
Department of Transportation Indiana Housing Finance Authority Regional Planning Commission	Local EMA Director Local Flood Plain Manager

The members will with the assistance of the Polis Center, National Weather Service, U.S. Geological Survey, Purdue University's Civil Engineering Division, and Rose Hulman University develop a State Risk and Vulnerability Assessment. This assessment will better reflect the need for Indiana to continue its planning efforts in order to reduce or eliminate the vulnerability to natural and man-made hazards. In doing so, the council will further develop the state mitigation goals and oversee the state's efforts to implement the objectives and tasks in the state's operations to achieve these goals.

Members were chosen not only on the basis of direct impact on state facilities and operations or coordination with local units of government that can have an impact on their mitigation activities, but also because they are involved in other planning alternatives. The representation on the sub committee by the State Planner, Local Planner and Homeland Security Planner represents the effort to coordinate all of IDHS's planning activities, and most importantly the development of a comprehensive risk and vulnerability assessment for the entire state. The goal is to make this risk assessment one that will serve as a reference document for all state and local agencies.

Regional planning commissions and Indiana Housing Finance Authority work directly with local jurisdictions to assist in comprehensive planning for development and/or economic growth within their member communities. Furthermore, they are tasked with assisting the communities in implementing the planning goals of the communities. The Departments of Transportation, Natural Resources within their scope of work are involved in (both short and long term) planning and implementation for the improvement of state facilities and infrastructure.

The Dam Safety and Floodplain sections of Department of Natural Resources' Division of Water work directly with not only state programs, but also with local jurisdictions and private development and dam owners in programs that directly impact the residents of the state (flood hazards). They are involved in state mapping of the floodplains and the Emergency Action Plans for dam owners and operators. The Dam Safety section also oversees the maintenance of private and public levees and the improvements of these structures.

The Maumee River Basin Commission is a state commission that coordinates the storm water and flood control activities in the counties that make up the Maumee River watershed. They have been a model in their active pursuit of flood plain management and mitigation projects and planning for their member counties.

Indiana Department of Environmental Management works with local jurisdictions (counties) and private industry to maintain and develop Local Emergency Planning Committees to deal with the transportation, storage and use of hazardous materials. These committees were established not only for the protection of the natural environment, but also the protection of their citizens that may by accident become exposed to these materials.

The Indiana GIS Commission was tasked by the Governor's office to coordinate the development of a statewide repository of maps and overlaying layers of data for the use of Hoosiers and their governmental agencies. Additionally, they were tasked to ensure that sensitive data was available only on a "need to know" basis. This would include specific data what may be necessary for responding agencies to have access to in order to manage incidents that may occur, but do not have a direct use by the public at large. For example, the location of police

stations may have a direct use by the public. However, the nature of construction, security systems, the location of prisoners or ammunition storage of the police station has would not have a general application to the public at large. Most important is the commission's expertise in the use of GIS for mapping in the development of the states risk assessment.

By invitation of the Governor the subcommittee will include private business and industry in their planning activities. Although all industries and businesses have developed their own planning efforts, the committee will try to include businesses that have direct knowledge of mitigation activities.

The state mitigation planning process took into consideration the development of numerous plans throughout the Indiana Department of Homeland Security as well as other state agencies. Members of the various planning efforts were included in the state mitigation planning team and members of the planning team have provided input and advice to the planners for their efforts as well. Programs included in this exchange were: Dept of Energy Emergency Planning Effort, IDHS Homeland Security strategic planning effort, IDHS Earthquake planning effort, and the Department of Natural Resources Emergency Action Planning efforts for High Hazard Dams.

2.3 Coordination with Agencies through the Project Development Process

Agency coordination during project development aids in project scoping. This coordination also saves time later on when FEMA undertakes the environmental review process in compliance with the National Environmental Policy Act, Executive Orders for Wetlands, Floodplains, Environmental Justice, and Earthquake, Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, Section 404 of the Clean Water Act, and other environmental laws and regulations.

As evident in the chart below, all projects require review by the State Historic Preservation Officer (SHPO) with regard to potential impacts to historic structures as well as archaeological resources. Any project that could potentially disturb biological resources, either directly or indirectly will require review by the U.S. Fish & Wildlife Service for potential impact on threatened or endangered species and mitigation of those impacts. Any project that results in a direct or indirect impact on any waterway, water body, or wetland requires review by the U.S. Army Corps of Engineers (USACE) (see chart at the end of this chapter for USACE jurisdictions within Indiana). Projects located in the floodplain or that indirectly impact the floodplain will require consultation with FEMA's floodplain specialist. These are the major points of contact to satisfy FEMA's environmental review requirements for most Hazard Mitigation Grant projects. However, if any Environmental Circumstances (44 CFR, pt. 10) are triggered, then further agency consultation and more extensive environmental documentation would be

necessary from agencies reflected in the chart at the end of this chapter, "Agency Coordination by Environmental Issue".

Federal consultation requirements do not obviate the need for consultation and compliance with State requirements. For example, consultation with state agencies is needed in the following situations - any action within the floodway requires consultation with Indiana Department of Natural Resources (IDNR) Division of Water, any new or remodel building construction needs to comply with the UBC/URC, and any action disturbing the environment must also comply with state-listed threatened or endangered species in consultation with the Indiana Department of Natural Resources.

Consultation with the Indiana Department of Natural Resources will comply with state regulations to protect state-listed threatened and endangered species. The chart at the end of this chapter, "Agency Coordination by Environmental Issue" specifically identifies state agencies that need to be consulted.

Table 2-2 Project Coordination

Normal Channels of Coordination By Project Type	
Acquisitions/Elevations	IDHS, FEMA Region V-Hazard Mitigation Grant Program, State Historic Preservation Officer, U.S. Fish & Wildlife Service, Indiana Dept. of Natural Resources local land use & planning depts.
Culverts & Bridges	IDHS, FEMA Region V-Hazard Mitigation Grant Program, State Historic Preservation Officer, U.S. Fish & Wildlife Service, Indiana Dept. of Natural Resources, Indiana Dept. of Transportation, U.S. Army Corps of Engineers, FEMA floodplain specialists, local public works dept., watershed district.
Detention Basins	IDHS, FEMA Region V-Hazard Mitigation Grant Program, State Historic Preservation Officer, U.S. Fish & Wildlife Service, Indiana Dept. of Natural Resources, U.S. Army Corps of Engineers, FEMA floodplain specialists, local public works dept., watershed district.
Ring Levees	IDHS, FEMA Region V-Hazard Mitigation Grant Program, State Historic Preservation Officer, U.S. Fish & Wildlife Service, Indiana Dept. of Natural Resources, U.S. Army Corps of Engineers, FEMA floodplain specialists, local watershed district, local planning dept.
Slope/Bank Stability	IDHS, FEMA Region V-Hazard Mitigation Grant Program, State Historic Preservation Officer, U.S. Fish & Wildlife Service, Indiana Dept. of Natural Resources, Indiana Geological Survey, U.S.

	Geological Survey, local planning dept.
Earthquake Retrofit & Safe Rooms	IDHS, FEMA Region V-Hazard Mitigation Grant Program, U.S. Geological Survey, Central United States Earthquake Consortium, Indiana Geological Survey, State Historic Preservation Officer, U.S. Fish & Wildlife Service, Indiana Dept. of Natural Resources, local building department

State Agencies' Responsibility & Mitigation Programs

- **Office of the Governor**

- **Function:** Under Indiana Law the Governor is responsible for the Coordination of all Indiana's emergency/disaster management system including mitigation programs.
- **Resource for Mitigation:** The Governor can request appropriations from the General Assembly for disaster assistance whenever he/she deems it necessary for the protection of all citizens.

The Authority of an Executive Order can establish and require that the state, its agencies and departments and local communities adopt mitigation strategies and principles as part of their governing or regulatory functions.

- **Indiana Department of Homeland Security (IDHS)**

- **Function:** IDHS serves as administrator and coordinator of the State's mitigation projects that have been funded by the federal government through FEMA.
- **Resource for Mitigation:** The State Hazard Mitigation Officer serves as a member of the Indiana State Hazard Mitigation Council (ISHMC). The ISHMC identifies mitigation projects, evaluates hazards and prioritizes projects for funding. To implement HMGP projects, IDHS coordinates with all the agencies listed here, as needed.

- **Indiana Department of Transportation (INDOT)**

- **Function:** Construction and maintenance of the major state and federal highways and interstates and related infrastructure within the state.
- **Areas of Interest:** Construction and improvement of bridges, culverts, and roadways to earthquake and flood reduction requirements.
- **Resources for Mitigation:** Provides technical assistance for relocation of critical facilities, relocation of bridges, and upgrading of culverts. Member of the ISHMC.

- **Indiana Department of Natural Resources (IDNR)**

- **Function:** Regulates the state's rivers, streams, reservoirs, lakes and floodplains. Administers and enforces National Flood Insurance Program

regulations and State Floodplain regulations. Advises local communities regarding enforcement of their floodplain ordinances.

- **Areas of Interest:** Historical & archaeological resources, threatened or endangered species, administers the Dam Safety Act - inspection, enforcement, and permitting. The IDNR, Division of Water, is the principal State agency that cooperates in USGS data-collection programs. Currently, more than 80 percent of the continuous hydrologic data-collection activity is maintained through efforts cooperatively funded by the IDNR and the USGS.

- **Resources for Mitigation:**

Indiana State Historic Preservation Office – Section 106 of the National Historic Preservation Act requires that Federal agencies “take into account the effect of the undertaking (proposed Project) may have on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register (of Historic Places)”. FEMA, in coordination with the State Historic Preservation Officer (SHPO), must identify effects of the actions. FEMA must then obtain concurrence from the SHPO on the eligibility of the identified resource and the potential to affect it. If there are adverse effects, FEMA, in cooperation with the applicant and Grantee, enters into consultation with the SHPO on way to avoid or mitigate effects to cultural resources and develop a project-specific agreement with the SHPO that identifies the agreed-upon measures to mitigate effects. FEMA may consult with the Advisory Council on Historic Preservation in some situations.

Threatened or Endangered Species – Coordination early in project development to determine potential effects on threatened or endangered species. Does not exclude the need for coordination with U.S. Fish & Wildlife.

Hydrological Studies--maintains records of lake, stream, and river levels necessary for proper identification of flooding hazards.

Member of the ISHMC.

- **Indiana Geological Survey**

- **Function:** Provides services to the state of Indiana that contributes to the wise stewardship of its citizenry through the gathering and interpretation of relevant geological information. This mission is carried out through a combination of the following activities: geologic sample and data collection and storage, information dissemination (in the form of published maps, reports and databases), educational outreach programs, focused research initiatives and cooperative investigations with governmental agencies, industries and educational organizations. A member of the Association of Central United States Earthquake Consortium.
- **Resources for Mitigation:** Consultation on geologic features and soil types, subsidence, slope stability.

Member of the Mitigation Planning Subcommittee

- **Indiana Department of Environmental Management (IDEM)**
 - **Function:** Construction and upgrading of water and waste treatment facilities by means of Federal Environmental Protection Agency funding.
 - **Areas of Interest:** Identify disaster environmental concerns and issues and mitigation projects.
 - **Resources for Mitigation:** Technical assistance concerning Superfund sites. Member of the ISHMC.

- **Indiana State Department of Health**
 - **Function:** Identifies and monitors issues that may affect the public health within the area of a disaster, i.e., well contamination, disease and vector control, etc.
 - **Areas of Interest:** Public health.
 - **Resources for Mitigation:** Member of the ISHMC.

- **Indiana Department of Commerce**
 - **Function:** Provides funding under the Community Development Block Grant Program and Economic Development Program for infrastructure construction/improvement and commercial property acquisition/relocation in designated mitigation projects.
 - **Resources for Mitigation:** Can supply matching funds to communities for acquisition/elevation projects under the Community Development Block Grant (CDBG) program. Provides technical assistance to communities through EDA programs.

Member of the ISHMC.

- **Indiana Housing Finance Authority**
 - **Function:** Funding for construction of housing through its low to moderate income housing, senior citizen housing, etc.
 - **Resources for Mitigation:** Funding for relocation of floodplain residents, i.e. new housing.

Member of the ISHMC.

- **Indiana General Assembly**
 - **Function:** Responsible for writing, enacting and funding laws to require those mitigation principles are met and programs funded.
 - **Resources for Mitigation:** Funding of state disaster assistance to local communities and state agencies. Under the funding authority, they can assist communities that are unable to meet the matching requirements of the federal grant program.

- **Federal Emergency Management Agency**

- **Function:** Administers and coordinates a variety of disaster and emergency management programs and funding programs available under the Stafford Act and the Earthquake Hazards Reduction Act. Administers and coordinates the National Flood Insurance Program and its funding of mitigation projects and programs. Assists communities and their citizens to recover from Presidential declared disasters and works to prevent future disasters.
- **Resources for Mitigation:** Provides a federal 75% match Hazard Mitigation Grant Program, for community hazard mitigation projects. Provides technical assistance to the State and communities toward the implementation of these projects. Undertakes eligibility, benefit/cost, and environmental reviews of Hazard Mitigation projects. Administers the National Flood Insurance Program, and provides technical assistance to the state and communities to effectuate compliance with NFIP regulations. Under NFIP, mitigation resources to the community also include FMA and CRS.

- **COMMUNITY RATING SYSTEM**

The Community Rating System (CRS) provides a discount in flood insurance premiums to property owners in participating communities. CRS credit points are given for a wide range of floodplain management activities, and the total of these points determines the amount of the discount.

Figure 1 shows the number of NFIP flood insurance policies in CRS communities in Indiana. Figure 1 also shows the amount of premium paid for those policies and the savings those property owners realizes from their community's participation in the CRS. Policies for properties within the Special Flood Hazard Area (SFHA) in communities in Class 9 and better communities receive a discount of 5% per class. Thus, the premium for property in the SFHA in a CRS Class 7 community is reduced 15%. The premium for property outside the SFHA is reduced by 10 % for Class 1-6 communities, and 5 % for Class 7-9 communities. Preferred Risk Policies do not receive a CRS discount because they already receive a favorable rate.

Figure 1 - CRS Savings for participating Indiana CRS Communities

Indiana Community Rating Service Participants							
Community #	Name	CRS Entry Date	Current Effective Date	Current Class	% Discount for SFHA	% Discount for Non-SFHA	Status*
180302	Allen County	10/1/2002	5/1/2008	9	5	5	C
180150	Anderson, City of	5/1/2007	5/1/2007	8	10	5	C
180006	Bartholomew County	10/1/1993	10/1/1993	9	5	5	C
180007	Columbus, City of	10/1/1998	10/1/1998	9	5	5	C
180001	Decatur, City of	10/1/1993	5/1/2008	8	10	5	C
180257	Evansville, City of	10/1/1999	10/1/2004	8	10	5	C
180003	Fort Wayne, City of	10/1/1991	5/1/2007	8	10	5	C
180080	Hamilton County	10/1/1991	5/1/2004	7	15	5	C
180419	Hancock County	10/1/2003	10/1/2006	8	10	5	C
180159	Indianapolis, City of	10/1/2007	10/1/2007	8	10	5	C
180093	Kokomo, City of	10/1/1995	10/1/1996	8	10	5	C
180121	Kosciusko, County of	10/1/1997	05/1/2008	9	5	5	C
180382	Milford Junction, City of	10/1/1997	05/1/2008	8	10	5	C
180082	Noblesville, City of	10/1/1991	10/1/2006	5	25	10	C
180465	North Webster, City of	10/1/1997	5/1/2008	8	10	5	C
180122	Syracuse, City of	10/1/1997	5/1/2008	8	10	5	C
180256	Vanderburgh County	4/1/1999	4/1/1999	8	10	5	C
180263	Vigo County	10/1/1995	10/1/2005	10	0	0	R

*C= Current R= Rescinded

Altogether, about 5% of all NFIP communities participate, representing about two-thirds of all NFIP policies. These figures may be an approximate figure because some activity credits are increased by a population growth factor. Also, these credits are those currently effective through October 1, 2007 and do not reflect more recent activity. In addition note that the percent savings will not exactly equal the class discounts of 5%, 10%, etc. since the total premium paid include the federal policy fee which is not discounted. Also, as mentioned above, Preferred Risk Policies do not receive a CRS discount.

Additional benefits a community realizes from participation in the CRS include:

1. The CRS floodplain management activities provide enhanced public safety, a reduction in damage to property and public infrastructure, avoidance of economic disruption and losses, reduction of human suffering, and protection of the environment.
2. A community can evaluate the effectiveness of its flood program against a nationally recognized benchmark.
3. Technical assistance in designing/implementing some activities is available at no charge.
4. A CRS community's flood program benefits from having an added incentive to maintain its flood programs over the

years. The fact that the community's CRS status could be affected by the elimination of a flood-related activity or a weakening of the regulatory requirements for new development, should be taken into account by the governing board when considering such actions. A similar system used in fire insurance rating has had a strong impact on the level of support local governments give to their fire protection programs.

5. Implementing some CRS activities, such as floodplain management planning, can help a community qualify for certain federal assistance programs.

The following is a brief description of the eighteen-(18) activities that receive credit under the Community Rating System.

CRS Recognized Mitigation activities which result in the awarding of points for CRS accreditation.

300 Series - Public information	430 - Higher Regulatory Standards
310 - Elevation Certificates	440 - Flood Data Maintenance
320 - Map Information	450 - Stormwater Management
330 - Outreach Projects	500 Series - Flood Damage Reduction
340 - Hazard Disclosure	510- Floodplain Management Planning
350 - Flood Protection Information	520 - Acquisition and Relocation
360 - Flood Protection Assistance	530 - Flood Protection
400 Series - Mapping & Regulations	540 - Drainage System Maintenance
410- Additional Flood Data	610 - Flood Warning
420 - Open Space Preservation	620 - Levee Safety
	630 - Dam Safety

▪ **FLOOD MITIGATION ASSISTANCE**

The Flood Mitigation Assistance Program (FMA) was created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 (42 U.S.C. 4101) with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP). FMA regulations can be found in 44 CFR Part 78. Funding for the program is provided through the National Flood Insurance Fund. FMA is funded at \$20 million nationally.

FMA provides funding to assist States and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program (NFIP).

There are three types of grants available under FMA: Planning, Project, and Technical Assistance Grants. FMA Planning Grants are available to States and communities to prepare Flood Mitigation Plans. NFIP-participating communities with approved Flood Mitigation Plans can apply for FMA Project Grants. FMA Project Grants are available to States and NFIP participating communities to implement measures to reduce flood losses. Ten percent of the Project Grant is made available to States as a Technical Assistance Grant. These funds may be used by the State to help administer the program. Communities receiving FMA Planning and Project Grants must be participating in the NFIP. A few examples of eligible FMA projects include the elevation, acquisition, and relocation of NFIP-insured structures.

It is sometimes beyond the applicant's technical and financial resources to provide the complete technical information required for a full eligibility or environmental review of a complex project. The State and Region may provide technical assistance to the applicant to develop this

complete body of technical data by approving an application to complete a Phase I design, engineering, environmental, or feasibility study.

In 2006, the FMA program was enlarged to provide additional funding, awarded the first competitive grants under the Repetitive Flood Claims program. This grant, though competitive in nature, provides 100% federal money to communities in the program to acquire targeted properties. These communities must show a hardship in that it could not qualify for another grant due to a lack of a plan or is unable to make the match requirement or have the resources to manage the grant. In 2008 the first Severe Repetitive Loss grant will be awarded. Communities who do not qualify for a set aside fund, will compete for funding on a targeted list of properties that have suffered severe losses under the NFIP insurance program. This program has very strict rules of engagement, because the property owner is subject to penalties if they fail to go through with the acquisition proposed.

▪ **PRE-DISASTER MITIGATION COMPETITIVE**

The Disaster Mitigation Act of 2000 (*PUBLIC LAW 106-390—OCTOBER. 30, 2000*) brought significant changes to the FEMA mitigation programs. The act amended the Stafford Act changing the funding method of the Hazard Mitigation Grant Program, set mitigation planning standards for state and local governments and created the Pre-Disaster Mitigation Competitive Grant. The PDM-C Grant provides for a nationally competitive grant program for cost effective projects. Projects cannot be over \$3 million federal share; however there are no restrictions on the number of applications a community can submit each year. Additionally, “a State or local government may use not more than 10 percent of the financial assistance received by the State or local government under this section for a fiscal year to fund activities to disseminate information regarding cost-effective mitigation technologies.” The Program provided approximately \$114 million in funds for federal fiscal year 2008.

The regulations for the administration of the grant rank the projects according to their overall Cost Benefit Ratio, feasibility, the ability to provide a solution to a significant problem or concern to the community applying for the grant, and the communities’ commitment to mitigation and mitigation planning. The heaviest weight to the grading is the projects overall cost benefit ratio which during the first round of application provided 51% of the applications ranking. In doing this, the program hopes to ensure that the projects that provide the greatest fiscal benefit to the federal, state, local governments and the taxpayers are funded.

The program also provides funding for mitigation planning. Planning applications are evaluated separately from the project funding, but the grant money is from the same “pool” of funding. The PDM-C effective November 1, 2003 requires that a community have a FEMA approved mitigation plan and participating in the National Flood Insurance Program in order to receive a project grant award. This requirement makes the availability planning grants more important for locals who have not developed mitigation plans.

- **U.S. Fish & Wildlife Service**

- **Function:** Administers Section 7 of the Endangered Species Act.
- **Resources for Mitigation:** Requires environmental consultation and documentation for all hazard mitigation grant projects to reach an effect/no effect determination of the project’s impact on threatened or endangered species. Initially, the presence of threatened or endangered species in a project area is determined. If these species are found, consultation with USFWS follows to determine mitigation for the effect on these species. The mitigation is usually a construction window or a construction method to minimize or avoid significant impacts on these species. The environmental documentation becomes part of the Hazard Mitigation Grant application.
 - Review Clean Water Act permits for wastewater discharges, wetland fill and development.
 - Under Fish and Wildlife Coordination Act, report on impacts to fish and wildlife of federal or federally funded projects.
 - Consult with federal agencies to ensure compliance with the Endangered Species Act.

- **U.S. Army Corps of Engineers**

- **Function:** Responsible for permitting of construction projects within the navigable waters of the United States and the design and construction of flood control projects along rivers and waterways, coastal areas etc. This includes construction of flood control dams, flood walls and levees for cities and towns. Also, responsible for identification and regulation of wetlands.
- **Resources for Mitigation:** All projects that may affect streams, rivers, lakes, oceans, wetlands, or any waters of the U.S. may require a U.S. Army Corps of Engineers Clean Water Act permit to proceed. In these cases, the applicant should work with the U.S. Army Corps of Engineers to develop the project and consider alternatives to avoid impacts to wetlands and other significant resources. This coordination complies with Section 404 of the Clean Rivers Act, and Section 10 of the Rivers and Harbors Act.

Any hazard mitigation grant project that has the potential for affecting wetlands or waterways requires documentation of consultation with USACE. This includes projects as flood control dams, flood walls, berms, detention ponds, bridges, and any project that would traverse or impact a wetland.

- **U.S. Dept. of Housing & Urban Development**

- **Function:** HUD may provide statutory (for Presidentially declared disasters) and regulatory waivers in the CDBG and HOME programs to increase the flexibility and the effectiveness of using funds for disaster recovery.
- **Resource for Mitigation:** Disaster Recovery Supplemental grants (DRI) provides flexible grants to help cities, counties, and States recover from Presidentially-declared disasters, especially in low-income areas.
- **Purpose:** When disasters occur, Congress may appropriate additional funding for the CDBG and HOME programs as supplemental grants for disaster recovery to rebuild the affected areas and bring crucial seed money to start the recovery process. Since it can fund a broader range of recovery activities than most other programs, DRI helps communities and neighborhoods that otherwise might not recover due to limited resources. DRI supplements disaster programs of the Federal Emergency Management Agency, the Small Business Administration, and the U.S. Army Corps of Engineers.
- **Type of Assistance:** HUD generally awards noncompetitive grants by a formula that considers disaster recovery needs not met by other Federal disaster assistance programs.
- **Eligible Grantees:** DRI funds go to States and local governments in places that have been designated by the President of the United States as disaster areas. Some supplemental appropriations may restrict funding solely to States. These communities must have significant unmet recovery needs and the capacity to carry out a disaster recovery program (usually these are governments that already receive HOME or Community Development Block Grant allocations).
- **Eligible Customers:** DRI primarily benefits low-income residents in and around communities that have experienced a natural disaster. Grantees must award at least half of DRI funds for activities that benefit low-and moderate-income persons. These can be either activities in which the majority of people who benefit have low or moderate incomes or activities that benefit an area in which at least 51 percent of the residents are of low- and moderate-income.
- **Eligible Activities:** Grantees may use DRI funds for recovery efforts involving housing, economic development, infrastructure and prevention of further damage, if such use does not duplicate funding available from the Federal Emergency Management Agency, the Small Business Administration, and the U.S. Army Corps of Engineers.

Examples of these activities include:

- (1) Buying damaged properties in a flood plain and relocating them to safer areas;
- (2) Relocation payments for people and businesses displaced by the disaster;
- (3) Debris removal;
- (4) Rehabilitation of homes and buildings damaged by the disaster;

- (5) Buying, constructing, or rehabilitating public facilities such as water and sewer systems, streets, neighborhood centers, and government buildings;
 - (6) Code enforcement;
 - (7) Homeownership activities such as down payment assistance, interest rate subsidies and loan guarantees;
 - (8) Public services (generally limited to no more than 25 percent of the grant);
 - (9) Energy conservation activities;
 - (10) Helping businesses create jobs; and
 - (11) Planning and administration costs (limited to no more than 20 percent of the grant).
- **Application:** HUD notifies eligible governments, which must then develop and submit an Action Plan for Disaster Recovery before receiving DRI grants. The Action Plan must describe the needs, strategies, and projected uses of the Disaster Recovery funds.

INDIANA HOUSING FINANCE AUTHORITY (IHFA) is the state agency in Indiana that administers HUD programs. As a consequence of the three significant flooding events in Indiana during 2002 and 2003, IHFA introduced the “Voluntary Acquisition/Demolition program” to acquire homes in the areas that were impacted by Presidentially declared flood disasters. These grants are awarded on a competitive basis to acquire substantially damaged, destroyed or floodway residences damaged by flooding which resulted in a presidential disaster declaration.

The awards are up to \$500,000 per community per award cycle on a 90/10 match basis. However, IHFA only has approx \$5 million dollars annually to fund all of their grants (Main Street, Shelters to Homes, etc). The Acquisition/demolition projects compete with all of the programs for these dollars.

- **U.S. Department of Commerce**
 - **Function:** Economic Development Administration -- Title IX Economic Adjustment Assistance Program Funding for planning and construction of public facilities and business development. Title III to respond to developmental opportunities in distressed areas.
- **National Oceanic and Atmospheric Administration**
 - **Function:** Coastal Zone Management, Flood observing and warning system, and Habitat Conservation -- provides statistical information for the identification of hazards and vulnerability of communities to those hazards. This information is vital to identifying mitigation projects before, during and after a disaster.

- **U.S. Geological Survey**

- **Function:** The U.S. Geological Survey (USGS) serves the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect quality of life. The USGS is a primary source of flood and drought data, earthquake information, mineral data, energy sources, satellite imagery, and high-quality maps.

In Indiana, the USGS operates and maintains a state-wide hydrologic monitoring network that consists of streamflow-gaging stations, ground-water monitoring wells, and lake-level monitoring stations. All USGS streamflow-gaging stations are equipped with near real-time data telemetry that is publicly available from the World Wide Web. The USGS Indiana Water Science Center also has participated in studies that address the availability of ground water for public supplies, agriculture, and industry; locations and quality of mineral resources; flood-risk issues associated with land-use decisions; the effect of water shortages and drought; sources and amounts of sediments that flow in rivers and streams; rates at which selected lakes are being filled by sediments; amounts of pesticides and other chemicals that are reaching water supplies; and the extent of ground-water flow systems and the effects of those systems on pollutant migration and Indiana water supplies. In response to the water-information needs of the individuals and agencies required to make important economic, environmental, and regulatory decisions, the USGS maintains a long-term base of water-resources data in Indiana

Resources for Mitigation: The USGS, in collaboration with its partners, can help reduce disaster losses by:

- Issuing more timely and accurate warnings of the severity and locations of hazards when they occur
- Ensuring the availability of hazard predictions and warnings to all those who may be impacted by a natural hazard
- Developing products in formats that are useful to a wide range of users and that can be quickly put into the hands of emergency management personnel to guide their rescue and recovery efforts
- Characterizing natural hazards and their risks
- Installing and operating the monitoring networks necessary to detect and track hazardous phenomena -- Increasing the scientific understanding of why, where, how, and when natural disasters occur and communicating that understanding to affected communities and the Nation.

The USGS widely disseminates hazard data through the following:

- **Natural Hazards Support System:** Natural Hazards Support System (NHSS): The NHSS enables users to monitor and analyze natural hazard events as they occur in an integrated geospatial view that combines reference data including shaded relief, transportation, and hydrography.
- **WaterWatch:** Current streamflow conditions at active, real-time USGS gages at a glance. WaterWatch includes downloadable GIS shape files. WaterWatch products include:
 - Maps of flood and high flow conditions that show all stream gages with water levels above the National Weather Service designated flood stage
 - Drought Watch: maps that show drought conditions based upon current streamflow data
- **USGS streamflow-gaging station real-time data** – stage and streamflow data transmitted every 1 to 4 hours.
- **ANSS -Advanced National Seismic System:** A portal to earthquake map products and real-time information, including:
 - Automatic maps and event information for recent earthquakes available within minutes online,
 - ShakeMaps: instrumentally measured shaking intensity mapped in a certain region. Fast information on strong shaking in urban areas helps get emergency response to the right places.
 - Hazard Maps that identify the areas of the country that are mostly likely to experience strong shaking in the future. Zip code or latitude-longitude lookup is available.
 - Earthquake Notification: Automated notifications of earthquakes through e-mail, pager, or cell phone. Rapid information and updates to first responders, and resources for media and local government.
 - CISEN Display: graphically alerts users, in near real-time, of seismicity as well as vital earthquake-hazards information following a significant earthquake.
 - Earthquake Catalog & Data: Online catalog search and downloadable information and technical data.
 - Earthquake Info by Region: information about earthquake hazards, historical seismicity, faults, and more is available for different regions of the country and by State.

USGS data are available through the National USGS Web page, <http://www.usgs.gov> or through the USGS Indiana Water Science Center Web page, <http://in.water.usgs.gov/>.

- **Natural Resources Conservation Service (NRCS)**

- **Function:** Provide technical and financial assistance in planning and executing works of improvements to protect develop and use land and water resources in small watersheds. Assistance is provided in the form of project grants and advisory and counseling services.

- **Resources for Mitigation:** Provide technical and financial assistance in planning and executing works of improvements to protect, develop and use land and water resources in small watersheds. Assistance is provided in the form of project grants and advisory and counseling services. Protect topsoil resources from erosion by water, wind and over us. Prevention and reduction of rural flooding. Provide water quality improvements and drought management for agricultural and rural communities. However, funding is too limited and inconsistent to seriously consider this as a day to day tool for mitigation.
- **Federal Highway Administration**
 - **Function:** Develop and implement design standards for the construction of new highways.
 - **Resources for Mitigation:** Provides funding and grants for the construction and repair and restoration of Federal-aid roads that have been damaged as the result of a catastrophic natural disaster.
- **Central United States Earthquake Consortium**
 - **Function:** The Central U.S. Earthquake Consortium is a partnership of the federal government and the seven states most affected by an earthquake in the New Madrid Seismic Zone – Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee. Established in 1983 with funding support from the Federal Emergency Management Agency, CUSEC's primary mission is,"... the reduction of deaths, injuries, property damage and economic losses resulting from earthquakes in the Central United States."

2.4 Agency Coordination by Environmental Issue

The following environmental issues need to be considered with every hazard mitigation grant project. The answers are eventually entered into FEMA's NEMIS database system. Each issue must fit into the following categories:

- Not in the project area.
- In project area – effect unknown.
- In the project area with no effect.
- Adverse effect.
- Presence in area undetermined.

Table 2-3 Agency Coordination by Environmental Issue	
Issue	Consult with:
Aquatic and Terrestrial Biotic Resources	DNR Division of Fish & Wildlife (317) 233-4579 U.S. Fish & Wildlife Service Supervisor Bloomington Field Office (812) 334-4261 x217 USGS Indiana Water Science Center 317-290-3333
Archaeological or Cultural Resources	Local Historic Society State Historic Preservation Office (317) 232-4020
Coastal Zone Management & Coastal Barriers	DNR Water Division, Coastal Coordinator (317) 232-4160 U.S. Fish & Wildlife Service Supervisor Bloomington Field Office (812) 334-4261 x217
Designated Floodplain/Floodway	Local floodplain administrator DNR Division of Water, Floodplain Mgmt. (317) 232-4160 FEMA, Region V, Mitigation Division NFIP specialist – (800) 621-FEMA Floodplain specialist – (800) 621-FEMA
Drainage (Culvert upgrade) (Relocation of critical facilities)	Indiana Dept. of Transportation (317) 232-5546 FEMA, Region V, Mitigation Division NFIP specialist – (800) 621-FEMA Floodplain specialist – (800) 621-FEMA
State or National Forests Hoosier National Forest	U.S. Forest Service Hoosier National Forest Supervisor Brownsville Ranger District -- (812) 275-5987
Hazardous Materials	Indiana Dept. of Emergency Mgmt, Environmental Response (317) 308-3049

Issue	Consult with:		
	EPA – Region V (312) 886-0211		
Historic Structures	State Historic Preservation Officer (317) 232-1646 Local historical society		
Hydrology/Hydraulics	DNR Division of Water (317) 232-4160 FEMA, Region V, Mitigation Division NFIP specialist – (800) 621-FEMA Floodplain specialist – (800) 621-FEMA USACE *		
	Permit Evaluation A Regulatory Office Detroit District (313) 226-6828	North Section (Indiana) Regulatory Branch Louisville District (502) 582-5718	Calumet Office (219) 923-1763 Chicago District (312) 886-8451
	NRCS State Conservationist (317) 290-3200 USGS Indiana Water Science Center 317-290-3333		
Land Use/Development Patterns	Dept. of Commerce Community Development (317) 232-8908 Regional Planning Commissions		
Local Economy/Community Services	Dept. of Commerce Community Development (317) 232-8908 Regional Planning Commissions		
Low Income or Minority Populations	Dept. of Commerce Community Development– (317) 232-8908 HUD Community Planning & Development Representative (317) 226-6303		
Prime Farmland	State Dept. of Agriculture Rural Development Council (317) 232-8765 NRCS State Conservationist (317) 290-3200		
Slopes & Soil	Indiana Geological Survey Environmental Geology (812) 855-7428 USGS State Representative (317) 290-3333 NRCS State Conservationist (317) 290-3200		

Issue	Consult with:		
Special Status Natural Areas	DNR Div. of Nature Preserves (317) 232-4052 USFWS Supervisor Bloomington Field Office (812) 334-4261 x217		
Threatened/Endangered Species	DNR, Division of Fish & Wildlife DNR, Div. of Fish & Wildlife (317) 232-8160 USFWS Supervisor Bloomington Field Office (812) 334-4261 x217		
Water Quality	Dept. of Environmental Management Water Assessment Branch (317) 308-3235 USACE*		
	Permit Evaluation A Regulatory Office Detroit District (313) 226-6828	North Section (Indiana) Regulatory Branch Louisville District (502) 582-5718	Calumet Office (219) 923-1763 Chicago District (312) 886-8451
	EPA – Region V (312) 886-0211		
	USGS Indiana Water Science Center 317-290-3333 DNR Division of Water (317) 232-4020 USACE **		
	Permit Evaluation A Regulatory Office Detroit District (313) 226-6828	North Section (Indiana) Regulatory Branch Louisville District (502) 582-5718	Calumet Office (219) 923-1763 Chicago District (312) 886-8451

** Indiana Counties in USACE Districts

- Detroit District entire counties: De Kalb, Elkhart, Jasper, La Grange, Lake, La Porte, Newton, Porter, St. Joseph, Steuben.
- Detroit District partial counties: Adams, Allen, Benton, Kosciusko, Marshall, Noble, Pulaski, Starke, Wells, White.

- All counties in the Wabash Watershed and south are within the jurisdiction of the Louisville District.
- Newton and Lake Michigan Watersheds are within the jurisdiction of the Calumet Office of the Chicago District.

2.5 Integration with FEMA Mitigation Programs and Initiatives

The Indiana multi-hazards mitigation plan is a business plan that examines the natural and man made hazards and risks facing the communities and lays out goals to address each of the hazards and risks and projects that would fulfill those goals. Although the plan is mandated by FEMA, it is not reliant upon FEMA actions and funds alone. The plan takes an open perspective and examines how the state and federal community can best address the needs of the communities that make up our great state.

Whenever it is possible FEMA funds and programs are utilized to address the most common hazards and risks to the State (flooding, earthquakes, tornados, winter storms, etc.). However, other programs may be utilized to address specific challenges such as storm water run off, bank erosion, and dam and levee issues.